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Descriptions of five new trifines from Taiwan (Lepidoptera, Noctuidae, Noctuinae, Ipimorphinae[1])

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Abstract Five new species, most probably endemic to Taiwan, are hereinafter described: *Hermonassa hemicyclia* n. sp., *H. legraini* n. sp., *Diarsia yoshimotoi* n. sp. and *D. unica* n. sp. (Noctuinae) and *Mniotype aulombardi* n. sp. (Ipimorphinae).

Key words Lepidoptera, Noctuidae, Trifinae, Noctuinae, Ipimorphinae, *Hermonassa hemicyclia* n. sp., *Hermonassa legraini* n. sp., *Diarsia yoshimotoi* n. sp., *Diarsia unica* n. sp., *Mniotype aulombardi* n. sp., Taiwan, taxonomy.

***Hermonassa hemicyclia* n. sp.** (Figs 1-2, 9)

Male (fig. 1). Expanse 33-35 mm. Head, tegulae and thorax dark brown, the tips of the tegulae and the dorsal crests tinged with rufous. Fore wing dark brown, slightly irrorated with fuscous, the costal edge rufous. Subbasal line well defined by a yellowish streak from costa to vein 2. Antemedian line distinct only in its lower part. Postmedian line double, forming an elongate S. Subterminal line minutely dentate, with a brown suffusion. Orbicular, reniform and claviform blackish brown, darker than the ground colour, encircled by well defined whitish annuli. Hind wing nearly as brown as the fore wing, lacking any fuscous or purple shade. Underside pale brown, apex and costal area paler. A small discoidal lunule on hind wing. Antennae filiform, shortly ciliated.

Female (fig. 2). Expanse 33-36 mm. Identical to the male, except for the antennae, simple, not ciliated.

Male genitalia (fig. 9). Differing, particularly in the shape and position of the semicircular harpe, from all other species in this genus. Uncus long and thin; juxta presenting a long slerified process.

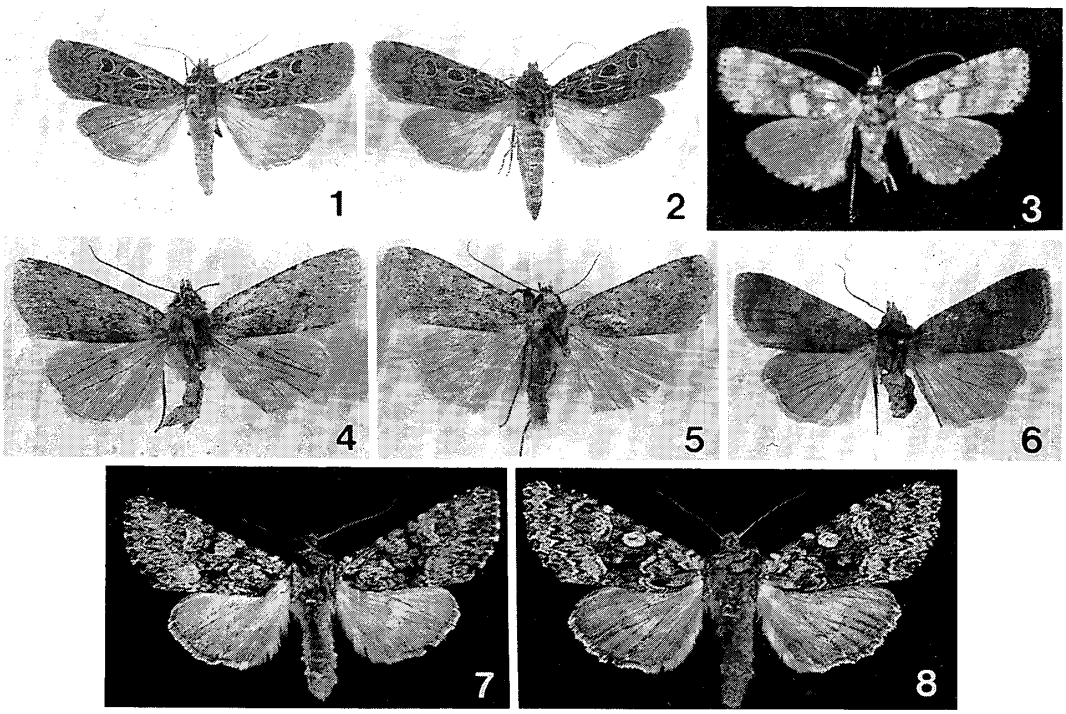
The new species looks externally very much like *H. phenax* Boursin, 1968, from Nepal, as far as the ground colour and the form of the stigmata are concerned. The male genitalia, however, are different and could be compared, at best, to *H. emodicola* Boursin, 1967*b*, described from northern Tibet, which, incidently, also occurs in Tayuling.

Holotype. ♂, Taiwan, Tayuling, Hualien Co., Road to Hohanshan, alt. 3,000 m, 19-21. VI. 1993 (F. Aulombard and J. Plante), in my coll. Paratypes: 4 ♂ 3 ♀, *idem*; 4 ♂ *idem*, 23. IX. 1992; 9 ♂ 7 ♀ Hohanshan, Hualien Co., 3,300 m, 19-21. VI. 1993 (F. Aulombard and J. Plante), in my coll., coll. A. Legrain, coll. F. Aulombard.

***Hermonassa legraini* n. sp.** (Figs 3, 10)

Male (fig. 3). Expanse 33 mm. Head, frons, palpi and tegulae whitish mixed with sepia.

[1] Cuculliinae sensu Hampson.



Figs 1-8. Adult moths. 1. *Hermonassa hemicyclia* n. sp., ♂, holotype. 2. *Ditto*, ♀, paratype, Hohanshan. 3. *Hermonassa legraini* n. sp., ♂, holotype. 4. *Diarsia yoshimotoi* n. sp., ♂, holotype. 5. *Ditto*, ♀, paratype, Tayuling. 6. *Diarsia unica* n. sp., ♂, holotype. 7. *Mniotype aulombardi* n. sp., ♂, holotype. 8. *Ditto*, ♀, paratype.

Ground colour of fore wing whitish, all markings light sepia. Basal, antemedian and postmedian lines double. Terminal line simple, angled on vein 2. Hind wing light sepia. Antennae filiform, with rows on minute ciliae.

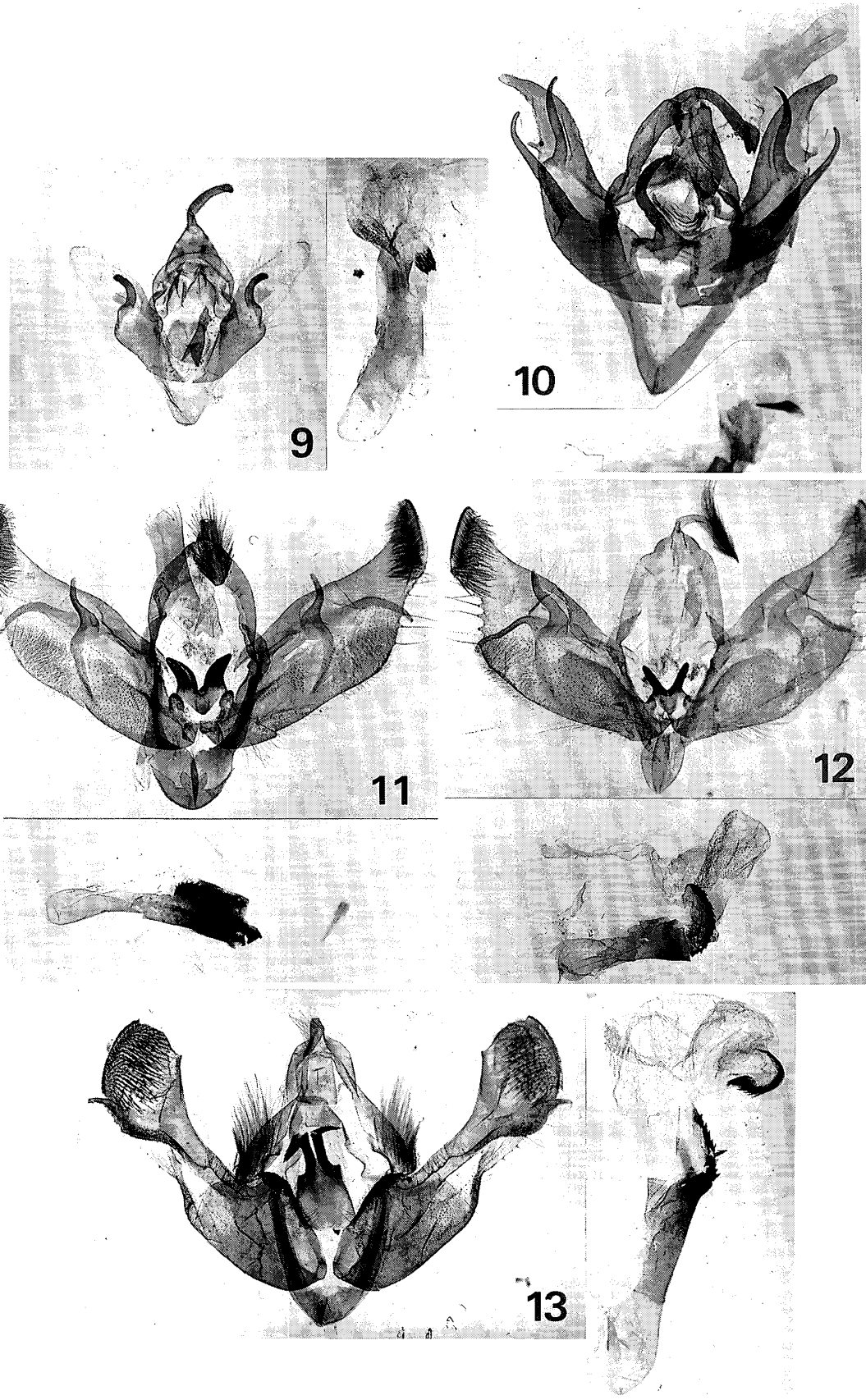
Female unknown.

The surprising lattice-like markings of the fore wing remind of *H. dictyota* Boursin, 1967*a*. In the original description of the latter species, the author pointed out that a similar kind of drawings was to be seen on the fore wing of several different species, belonging to quite different groups, genera, subfamilies and even families, such as *Mythimna tesselum* (Draudt, 1950) (Hadeninae), *Polypogon reticulatis* (Leech, 1900*b*) (Herminiinae), *Exheterolocha retifera* (Wehrli, 1934) (Geometridae), and other examples, like *Gaurenopsis conspicua* (Leech, 1900) (Cuculliinae) or *Paracolax angulata* (Wileman, 1915) (Herminiinae) could be added to this list.

Male genitalia (fig. 10). They are those of a species of the *arenosa-clava* group, close to *H. oleographa* Hampson, 1911 (=*griseosignata* Chen, 1983). However, the long harpe, the shape of the valve and of the sacculus, as well as the peculiar juxta prevent *legraini* from being confounded with any other species.

Holotype. ♂, Taiwan, Tayuling, Hualien Co., alt. 2,650 m, 25. IX. 1992 (F. Aulombard and J. Plante), in my coll.

The new species is dedicated to Dr Albert Legrain (Belgium).



***Diarsia yoshimotoi* n. sp.** (Figs 4-5, 11)

Male (fig. 4). Expanse 41 mm. Head, frons, tegulae and thorax olive-yellow suffused with purple ; palpi blackish brown, yellowish at tips, with some purple hairs at base ; tibiae and tarsi blackish, tinged with white. Ground colour of fore wing olive-fuscous irrorated with purple-grey, paler in the basal, costal and terminal areas. Subbasal line double from costa to vein 1 ; antemedian line indistinct, disappearing among some blackish markings from vein 4 to inner margin ; a waved median line not so well defined, also from vein 4 to inner margin ; orbicular and reniform same as the ground colour, but well defined by whitish annuli ; a black dot at base of reniform ; claviform absent ; a double postmedian line blackish, strongly bent outwards below costa, slightly angled inwards and then straight to the inner margin ; subterminal line almost parallel to the postmedian line, the interspaces with blackish markings along the veins ; terminal area olive-pink, clearer than the rest of the wing ; ciliae yellowish ; well marked points at costa. Hind wing olive-yellow, paler than the fore wing, with a slight pink shade and a well indicated discoidal lunule. Underside of both wings olive-yellow, the postmedian line conspicuous. A lunule on the hind wing. Antennae ciliated, dark brown, yellowish at base with some purple hairs.

Female (fig. 5) Expanse 40 mm. Exactly like the male, the antennae with shorter ciliae.

Male genitalia (fig. 11). General structure of the valve similar to all species in the *vulpina*-group, with a stout sacculus extending far beyond the two arms of the harpe, forming no nodge with the cucullus but curving evenly to it. The same form of valve can be seen, for instance, with *D. fletcheri* Boursin, 1969, *D. nyei* Boursin, 1969 and *D. hoenei* Boursin, 1954, all of them occuring in the Himalayan area, or with *D. henrici* (Corti-Draudt, 1933) and *D. canescens* (Butler, 1878) in the Chinese continent. However, both the two arms of the harpe are long, and go beyond the edge of the valve ; the dorsal process is sinuated, and particularly interesting is the length of the central arm, since such a character can only be seen among some Indo-Australian species such as *D. barlowi* Holloway, 1976, from Borneo. The setose zone of the sacculus is fairly developed, the uncus rather broad, and the striking form of the juxta will permit to distinguish *yoshimotoi* from all the related species.

This new species is dedicated to Mr Hiroshi Yoshimoto, whose knowledge of the Asiatic Noctuidae fauna has always been of great help to me.

Holotype. ♂, Taiwan, Wuling Farm, 35 km NE of Lishan, Taichung Co., alt. 1,750 m, 26. IX. 1992 (F. Aulombard and J. Plante), in my coll. Paratypes : 1 ♀, Taiwan, Tayuling, Hualien Co., alt. 2,650 m, 25. IX. 1992 (F. Aulombard and J. Plante), in my coll. ; 3 ♂ 2 ♀, *idem*, alt. 2,600 m, 28-29. VIII. 1983 (H. Yoshimoto), in coll. H. Yoshimoto.

***Diarsia unica* n. sp.** (Fig. 6, 12)

Male (fig. 6). Expanse 36 mm. Head, frons and tegulae light brown mixed with rufous ; palpi blackish, light brown at tip ; thorax black-brown, abdomen clearer, light brown. Fore wing with the apex slightly falcate, dark rufous, suffused with purple grey. Subbasal

Figs 9-13. Male genitalia. 9. *Hermonassa hemicyclia* n. sp., paratype, Tayuling, genitalia slide PL1511. 10. *Hermonassa legraini* n. sp., holotype, genitalia slide PL1557. 11. *Diarsia yoshimotoi* n. sp., holotype, genitalia slide PL1517. 12. *Diarsia unica* n. sp., holotype, genitalia slide PL1516. 13. *Mniotype aulombardi* n. sp., paratype, genitalia slide PL1588.

line simple, well defined, going straight from costa to inner margin; antemedian line strongly angled outwards on vein 4; medial line oblique from reniform to inner margin; reniform and orbicular scarcely clearer than the ground colour, with some yellowish points on the annulus; postmedian line double, the external part yellowish and much more conspicuous than the inner part, bent outwards below costa, slightly angled inwards at discal fold, incurved below vein 4; a double subterminal line yellowish, angled outwards on vein 7, then evenly incurved to inner margin; terminal area with all veins well defined; ciliae brownish. Hind wing paler than the fore wing, with a shiny shade, a well marked lunule and light brown ciliae. Underside of both wings reddish brown, the postmedian lines well marked and a conspicuous lunule on hind wing.

Female unknown.

Male genitalia (fig. 12). Valve of the same general structure as the preceding species, and belonging therefore to the *vulpina*-group. Both arms of the harpe, however, are much shorter and scarcely reach the valva edge; the juxta is not as strange as in the preceding species either, and reminds somehow of other species like, for instance, *D. albipennis* (Butler, 1889). The uncus is thin, sharp-pointed, and the setose area is diffused.

Though having quite different genitalia, the new species looks externally a little like *D. tincta* (Leech, 1900*a*), or like some small specimens of *D. ruficauda* (Warren, 1909).

Holotype. ♂, Taiwan, Wuling Farm, 35 km NE of Lishan, Taichung Co., alt 1, 750 m, 26. IX. 1992 (F. Aulombard and J. Plante), in my coll.

***Mniotype aulombardi* n. sp.** (Figs 7-8, 13)

Male (fig. 7). Expanse 43-45 mm. Head, thorax and frons grey-white, mixed with white hairs and some brown-black scales; tegulae with a black median line; patagia light grey, with scattered black scales; tarsi grey, ringed with whitish; abdomen dark grey, Ground colour of fore wing grey, with some orange-yellow dots. Subbasal line indistinct. Antemedian and postmedian lines double, filled in with whitish, the former dentate, angled outwards on vein 4, the latter bent outwards just below costa, then obliquely incurved; the median shade with black suffusion from reniform to inner margin; orbicular and reniform large, paler than the ground colour, well defined by black annuli, reniform with five white points on the annulus; subterminal line made on inner side of a series of large triangular blackish streaks, with grey dots in the interspaces; a terminal series of black lunules; ciliae grey, intersected with white. Hind wing grey, clearer in the basal area, with a slight discoidal lunule; ciliae white. Underside of fore wing dark grey, clearer in the costal and terminal area, the postmedian line well defined. Underside of hind wing dark grey, with a postmedian line and a discoidal lunule well marked. Antennae minutely serrate and fasciculate.

Female (fig. 8). Expanse 43-48 mm. Identical to the male, the hind wings, however, darker, and the antennae filiform.

Male genitalia (fig. 13). Close to *M. bathensis* (Lutzau, 1905), but with some differences, particularly in the length and shape of the cucullus, but also in the juxta and in the vesica.

I think *aulombardi* must be regarded as a bona species in spite of its close relationship to *bathensis*. One must keep in mind that in this particular genus specific differences may,

sometimes, be tiny. Furthermore, the habitus, particularly the ground colour, is different.

This new species is named after Dr François Aulombard, of Carentan, France, who was my fellow-traveller during two journeys to Taiwan, during which the above described species were captured.

Holotype. ♂, Taiwan, Hohanshan, Hualien Co., alt. 3,300 m, 19-21. VI. 1993 (F. Aulombard and J. Plante), in my coll. Paratypes: 2 ♂ 9 ♀, *idem*; 1 ♂ 4 ♀, Tayuling, Hualien Co., alt. 3,000 m, 21. VI. 1993 (F. Aulombard and J. Plante), in my coll. and coll. F. Aulombard.

References

Boursin, C., 1954. Die "*Agrotis*"-Arten aus Dr. H. Höne's China-Ausbeuten (Beitrag zur Fauna Sinica). I. Die Gattung *Diarsia* Hb. (= *Oxira* Walker) & II. Die Gattungen *Hemiexarnis* Brsn., *Eugnorisma* Brsn., *Sineugraphe* n. gen., ··· & c., *Bonn. zool. Beitr.* **5**: 213-309.

————, 1967*a*. Die neuen *Hermonassa* Walk.-Arten aus Dr. H. Höne's Ausbeuten. *Z. wien. ent. Ges.* **52**: 24-39, pls 1-9.

————, 1967*b*. Description de 26 espèces nouvelles de Noctuidae Trifinae paléarctiques et d'un sous-genre de la sous-famille des Apatelinae, *Entomops* **2**: 43-72, 85-108.

————, 1968. Die neuen *Hermonassa*-Arten der deutschen Nepal-Expeditionen 1962 und 1964, Khumbu Himal. *Ergeb. ForschUnternemens Nepal Hymalaya* **3**: 134-148.

————, 1969. Description de 40 espèces nouvelles de Noctuidae Trifinae paléarctiques et de deux genres nouveaux des sous-familles Noctuinae et Amphipyrinae. *Entomops* **2**: 215-240.

Butler, A. G., 1878. Descriptions of new species of Heterocera from Japan. Part II. Noctuites. *Ann. Mag. nat. Hist.* (5) **1**: 77-85, 161-169, 192-204, 287-295.

————, 1881. Description of new genera and species of heterocerous Lepidoptera from Japan. *Trans. ent. Soc. Lond.* **1881**: 1-23, 171-200, 401-426, 579-600.

Chen, Y.-X., 1983. Two new species of the genus *Hermonassa* Walker (Lepidoptera: Noctuidae). *Acta ent. sin.* **26**: 334-335.

Corti, A. & Draudt, M., 1933. *In* Seitz, A. (ed.), *Die Gross-Schmetterlinge der Erde* **3** (Suppl.). Stuttgart.

Draudt, M., 1950. Beiträge zur Kenntnis der Agrotiden-Faune Chinas aus den Ausbeuten Dr. H. Hönes. *Mitt. münch. ent. Ges.* **40**: 1-174, pls 1-18.

Hampson, G. F., 1911. Descriptions of new genera and species of Syntomidae, Arctiadae, Agaristidae and Noctuidae. *Ann. Mag. nat. Hist.* (8)**8**: 393-445.

Holloway, J. D., 1976. *Moths of Borneo, with special Reference to Mount Kinabalu.* viii, 132 pp., 32 pls. Kuala Lumpur.

Leech, J. H., 1900*a*. Lepidoptera Heterocera from northern China, Japan, and Corea. Part III. *Trans. ent. Soc. Lond.* **1900**: 9-161.

————, 1900*b*. Lepidoptera Heterocera from northern China, Japan and Corea. Part IV. *Ibid.* **1900**: 511-663.

Lutzau, 1905. *Hadena* (n. sp.) *bathensis* Lutzau: ex larva. *In* Slevogt, G. *Societas Entomologica* **20**: 17-18.

Moore, F., 1882. Heterocera (Cymatophoridae-Herminiidae). *In* Hewitson, W.C. & F. Moore. *Descriptions of new Indian lepidopterous Insects from the Collection of the late Mr W. S. Atkinson*, M. A., F. L.S., & c. Part 2: 89-198, pls 4-6.

Sugi, S., 1977. A new species of the Herminiinae from Japan (Lepidoptera; Noctuidae). *Tyô Ga* **28**: 41-42.

Warren, W., 1909-1914. Noctuidae. *In* Seitz, A. (ed.), *Die Gross-Schmetterlinge der Erde* **3**. Stuttgart.

摘　　要

台湾産ヤガの5新種 (Jacques Plante)

本報では，台湾産のいわゆるTrifinaeのヤガ5種を記載した．これらはいずれも台湾の特産種と考えられる．

Hermonassa hemicyclia n. sp.

外観はネパールの *H. phenax* Boursinに似るが，♂交尾器ではチベットから記載された *H. emodicola* Boursinに近い．なお，*emodicola* は台湾未記録であるが，大禹嶺では本新種と混棲する。模式産地：大禹嶺，合歓山．

Hermonassa legraini n. sp.

顕著な格子模様の種で，*H. dictyota* Boursinを思い起こさせる．前翅のこのような格子模様はいくつかの分類的に疎遠なグループに平行的に現われることが知られている．♂交尾器では，*arenosa-clava* groupの *H. oleographa* Hampson (=*griseosignata* Chen) に近い．模式産地：大禹嶺．

Diarsia yoshimotoi n. sp.

本種は *vulpina* groupに属するものであるが，♂交尾器juxtaの特徴的な形態により，この群の他種と区別できる．模式産地：Wuling Farm，大禹嶺．

Diarsia unica n. sp.

外観は *D. tincta* Leechや *D. ruficauda* Warren (ウスイロアカフヤガ) などに似ているが，本種も *vulpina* groupに属する．Harpeおよびjuxtaの形で同群の他種と区別される．模式産地：Wuling Farm.

Mnyotype aulombardi n. sp.

Mnyotype bathensis (Lützau)(ミヤマハガタヨトウ) に近縁な種で，♂交尾器にもわずかな相違しか表れないが，前翅の地色は灰色でミヤマハガタヨトウとは全く異なる．模式産地：合歓山，大禹嶺．

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